Soil Test Interpretations and Fertilizer Management for Lawns, Turf, Gardens, and Landscape Plants

Appendix: Soil pH Preferences for Selected Landscape Plants

	Acid below pH 6	Slightly acid pH 6-7	Slightly alkaline, above pH 7
Abeliophyllum distichum - Korean Abelialeaf	X	X	X
Abies balsamea - Balsam Fir	X		
Abies concolor - White Fir		X	X
Abies fraseri - Fraser Fir	X		
Acer ginnala - Amur Maple	X	X	X
Acer negundo - Box Elder	X	X	X
Acer platanoides - Norway Maple	X	X	X
Acer rubrum - Red Maple	X		
Acer saccharinum - Silver Maple		X	X
Acer saccharum - Sugar Maple		X	
Acer x freemanii - Freeman Maple		X	X
Ajuga reptans - Carpet Bugleweed		X	X
Alnus glutinosa - Common Alder	X	X	X
Amelanchier canadensis - Serviceberry	X		
Aesculus glabra - Ohio Buckeye		X	
Arctostaphylos uva-ursi - Common Bearberry	X		
Aristolochia durior - Dutchman's Pipe		X	X
Aronia spp Chokeberry	X		
Berberis koreana - Korean Barberry	X	X	X
Berberis thunbergii - Japanese Barberry		X	X
Betula lenta - Sweet Birch	X	X	
Betula nigra - River Birch		X	
Betula papyrifera - Paper Birch	X	X	X
Betula pendula - European White Birch	X	X	
Buxus microphylla koreana - Korean Littleleaf Boxwood		X	X
Buxus sempervirens - Common Boxwood		X	X
Calycanthus floridus - Sweet Shrub		X	
Campsis radicans - Common Trumpet creeper	X	X	X
Caragana arborescens - Siberian Pea Shrub			X

Carpinus caroliniana - American Hornbeam			X
Carya cordiformis - Bitternut Hickory		X	X
Carya ovata - Shagbark Hickory		X	
Castanea spp Chestnut		X	
Catalpa speciosa - Northern Catalpa		X	X
Celastrus scandens - American Bittersweet	X		
Celtis occidentalis - Hackberry	X	X	X
Cephalanthus occidentalis - Buttonbush		X	X
Cercis canadensis - American Redbud	X		
Chamaecyparis pisifera - Sawara False Cypress	X	X	
Chionanthus virginicus - White Fringetree	X		
Cladrastis lutea - Yellowwood			X
Clematis spp Clematis	X	X	
Cornus alba - Tatarian Dogwood	X	X	X
Cornus alternifolia - Pagoda Dogwood	X	X	
Cornus canadesis - Bunchberry	X	X	
Cornus racemosa - Gray Dogwood	X	X	X
Cornus sericea - Red Osier Dogwood	X	X	X
Corylus americana - American Hazelnut	X	X	X
Cotinus coggygria - Smokebush	X	X	X
Cotoneaster spp Cotoneaster		X	X
Crataegus spp Hawthorne		X	X
Daphne spp Daphne		X	X
Deutzia spp Deutzia		X	X
Diervilla lonicera - Dwarf Bush-Honeysuckle	X	X	X
Dirca palustris - Leatherwood		X	X
Elaeagnus angustifolia - Russian Olive	X	X	X
Euonymus alatus - Winged Euonymus	X	X	
Euonymus fortunei - Wintercreeper Euonymus	X	X	X
Forsythia spp Forsythia		X	
Fraxinus americana - White Ash		X	
Fraxinus nigra - Black Ash	X	X	X
Fraxinus pennsylvanica - Green Ash		X	X
Ginkgo biloba - Ginkgo		X	X
Gleditsia triacanthos - Honey Locust		X	X
Gymnocladus dioicus - Kentucky Coffeetree		X	X
Hammamelis virginiana - Common Witchhazel		X	
Hydrangea arborescens - Smooth Hydrangea	X	X	X
Hydrangea paniculata 'Grandiflora' - Peegee Hydrangea		X	
Hypericum prolificum - Shrubby St. Johnswort		X	

Ilex verticillata - Winterberry		X	X
Juglans cinerea - Butternut		X	X
Juglans nigra - Black Walnut			X
Juniperus chinensis - Chinese Juniper	X	X	X
Juniperus communis - Common Juniper	X	X	X
Juniperus horizontalis - Creeping Juniper	X		
Juniperus sabina - Savin Juniper		X	X
Juniperus scopulorum - Rocky Mountain Juniper		X	X
Juniperus virginiana - Eastern Red Cedar		X	X
Larix decidua - European Larch	X		
Larix laricina - Eastern Larch	X	X	X
Ligustrum ssp Privet		X	
Liriodendron tulipifera - Tuliptree		X	
Lonicera spp Honeysuckle		X	X
Maackia amurensis - Amur Maackia		X	X
Magnolia acuminata - Cucumber Tree Magnolia		X	X
Magnolia x loebneeri - Loebner Magnolia		X	X
Magnolia salicifolia - Anise Magnolia		X	X
Magnolia soulangiana - Saucer Magnolia	X		
Magnolia stellata - Star Magnolia	X		
Malus spp Flowering Crabapple	X	X	
Malus pumila - Common Apple	X	X	
Menispermum canadense - Common Moonseed		X	X
Microbiota decussata - Russian Cypress		X	X
Morus alba tatarica - Russian Mulberry	X	X	X
Myrica pennsylvanica - Northern Bayberry	X		
Ostrya virginiana - Ironwood		X	X
Pachysandra terminalis - Japanese Pachysandra	X		
Parthenocissus quinquefolia - Virginia Creeper		X	
Parthenocissus tricuspidata - Boston Ivy		X	X
Paxistima canbyi - Canby Paxistima	X		
Phellodendron amurensis - Amur Corktree	X	X	X
Philadelphus coronarius - Mockorange		X	X
Physocarpus opulifolius - Common Ninebark	X	X	X
Picea abies - Norway Spruce	X		
Picea glauca - White Spruce	X		
Picea pungens - Colorado Spruce		X	
Pinus banksiana - Jack Pine	X	X	X
Pinus cembra - Swiss Stone Pine		X	
Pinus koraiensis - Korean Pine		X	

Pinus mugo - Swiss Mountain Pine	X	X	
Pinus nigra - Austrian Pine		X	X
Pinus ponderosa - Ponderosa Pine		X	X
Pinus resinosa - Red Pine		X	
Pinus strobus - Eastern White Pine	X		
Pinus sylvestris - Scotch Pine		X	X
Populus spp Poplar		X	X
Potentilla fruticosa - Bush Cinquefoil		X	X
Prunus americana - American Plum		X	X
Prunus armeniaca - Apricot		X	X
Prunus maackii - Amur Chokecherry		X	X
Prunus nigra - Canada Plum		X	X
Prunus pennsylvanica - Pin Cherry	X	X	
Prunus serotina - Black Cherry		X	X
Prunus tomentosa - Nanking Cherry		X	X
Prunus triloba - Flowering Almond		X	X
Prunus virginiana - Common Chokecherry	X		
Pseudotsuga menziesii - Douglas Fir		X	
Ptelea trifoliata - Wafer Ash	X	X	X
Pyrus communis - Common Pear		X	X
Pyrus ussuriensis - Ussurian Pear		X	X
Quercus alba - White Oak		X	X
Quercus bicolor - Swamp White Oak		X	X
Quercus ellipsoidalis - Northern Pin Oak	X	X	X
Quercus macrocarpa - Bur Oak	X	X	X
Quercus palustris - Pin Oak	X		
Quercus rubra - Red Oak	X		
Quercus velutina - Black Oak		X	
Rhododendron mucronulatum - Korean Rhododendron	X		
Rhododendron spp Northern Lights Azalea	X	X	
Rhododendron spp PJM Rhododendron	X	X	
Rhus glabra - Smooth Sumac			
Rhus typhina - Staghorn Sumac	X		
Rhus aromatica - Fragrant Sumac		X	
Ribes alpinum - Alpine Currant		X	
Robinia pseudoacacia - Black Locust		X	X
Rosa rugosa - Rugosa Rose			X
Rosa spp Hybrid Tea Rose	X	X	
Rubus idaeus - Red Raspberry		X	
Rubus occidentalis - Black Raspberry	X	X	

Salix alba - White Willow		X	X
Salix pentandra - Laurel Willow		X	X
Sambucus spp Elderberry		X	X
Shepherdia argentea - Silver Buffaloberry			X
Sorbaria sorbifolia - Ural False Spirea		X	X
Sorbus americana - American Mountain Ash	X		
Sorbus aucuparia - European Mountain Ash		X	X
Spiraea x bumalda - Bumald Spirea	X	X	X
Spiraea x vanhouttei - Vanhoutte Spirea		X	
Staphylea trifolia - American Bladdernut		X	X
Symphoricarpos albus - Common Snowberry		X	
Syringa x chinensis - Chinese Lilac		X	X
Syringa meyeri - Meyer Lilac		X	X
Syringa reticulata - Japanese Tree Lilac		X	X
Syringa villosa - Late Lilac		X	X
Syringa vulgaris - Common Lilac			X
Taxus cuspidata - Japanese Yew		X	
Thuja occidentalis - American Aborvitae		X	
Tilia americana - American Linden		X	
Tilia cordata - Littleleaf Linden	X	X	X
Tsuga canadensis - Canada Hemlock	X		
Ulmus americana - American Elm		X	
Ulmus siberica - Siberian Elm		X	X
Vaccinium spp Blueberry, Lingonberry, Cranberry	X		
Viburnum dentatum - Arrowwood Viburnum		X	X
Viburnum lantana - Wayfaring Tree	X	X	
Viburnum lentago - Nannyberry		X	X
Viburnum opulus - European Cranberry Bush		X	X
Viburnum trilobum - American Highbush Cranberry		X	X
Vinca minor - Common Periwinkle		X	
Vitis spp Grape		X	
Weigela florida - Weigela		X	
Wisteria spp Wisteria		X	X

Source: C. Spurway, 1944. Mich. State Agric. Sta. Bull. 306, modified by M. Zins for Minnesota conditions

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Appendix: Soil pH Preferences for Selected Landscape Plants

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